

**STATE CONSTRUCTION CODE AMENDMENTS**

2022 GENERAL SESSION

STATE OF UTAH

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**LONG TITLE****General Description:**

This bill modifies Title 15A, State Construction and Fire Codes Act, and creates an exemption from licensure in the Professional Engineers and Professional Land Surveyors Licensing Act.

**Highlighted Provisions:**

This bill:

- ▶ amends provisions of Title 15A, State Construction and Fire Codes Act, by amending the:
  - Statewide Amendments to the International Residential Code;
  - Statewide Amendments to the International Plumbing Code;
  - Statewide Amendments to the International Mechanical Code; and
  - the State Fire Code;
- ▶ creates a licensing exemption for a person certified by the National Institute for Certification in Engineering Technologies at level III or IV in Water-Based System Layout or Fire Alarm Systems; and
- ▶ makes technical and conforming changes.

**Money Appropriated in this Bill:**

None

**Other Special Clauses:**

None

**Utah Code Sections Affected:**

AMENDS:

**15A-3-202**, as last amended by Laws of Utah 2021, Chapters 102 and 199

**15A-3-203**, as last amended by Laws of Utah 2019, Chapter 20

**15A-3-205**, as last amended by Laws of Utah 2019, Chapter 20

**15A-3-206**, as last amended by Laws of Utah 2021, Chapters 102 and 199

**15A-3-306**, as last amended by Laws of Utah 2019, Chapter 20

33           **15A-3-402**, as last amended by Laws of Utah 2020, Chapter 441

34           **15A-5-202**, as last amended by Laws of Utah 2019, Chapter 103

35           **15A-5-302**, as last amended by Laws of Utah 2019, Chapter 103

36           **58-22-305**, as last amended by Laws of Utah 2020, Chapter 339

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38           *Be it enacted by the Legislature of the state of Utah:*

39           Section 1. Section **15A-3-202** is amended to read:

40           **15A-3-202. Amendments to Chapters 1 through 5 of IRC.**

41           (1) In IRC, Section R102, a new Section R102.7.2 is added as follows: "R102.7.2  
42           Physical change for bedroom window egress. A structure whose egress window in an existing  
43           bedroom is smaller than required by this code, and that complied with the construction code in  
44           effect at the time that the bedroom was finished, is not required to undergo a physical change to  
45           conform to this code if the change would compromise the structural integrity of the structure or  
46           could not be completed in accordance with other applicable requirements of this code,  
47           including setback and window well requirements."

48           (2) In IRC, Section R108.3, the following sentence is added at the end of the section:  
49           "The building official shall not request proprietary information."

50           (3) In IRC, Section 109:

51           (a) A new IRC, Section 109.1.5, is added as follows: "R109.1.5 Weather-resistant  
52           exterior wall envelope inspections. An inspection shall be made of the weather-resistant  
53           exterior wall envelope as required by Section R703.1 and flashings as required by Section  
54           R703.8 to prevent water from entering the weather-resistive barrier."

55           (b) The remaining sections are renumbered as follows: R109.1.6 Other inspections;  
56           R109.1.6.1 Fire- and smoke-resistance-rated construction inspection; R109.1.6.2 Reinforced  
57           masonry, insulating concrete form (ICF) and conventionally formed concrete wall inspection;  
58           and R109.1.7 Final inspection.

59           (4) IRC, Section R114.1, is deleted and replaced with the following: "R114.1 Notice to  
60           owner. Upon notice from the building official that work on any building or structure is being  
61           prosecuted contrary to the provisions of this code or other pertinent laws or ordinances or in an  
62           unsafe and dangerous manner, such work shall be immediately stopped. The stop work order  
63           shall be in writing and shall be given to the owner of the property involved, or to the owner's

64 agent or to the person doing the work; and shall state the conditions under which work will be  
65 permitted to resume."

66 (5) In IRC, Section R202, the following definition is added: "ACCESSORY  
67 DWELLING UNIT: A habitable living unit created within the existing footprint of a primary  
68 owner-occupied single-family dwelling."

69 (6) In IRC, Section R202, the following definition is added: "CERTIFIED  
70 BACKFLOW PREVENTER ASSEMBLY TESTER: A person who has shown competence to  
71 test Backflow prevention assemblies to the satisfaction of the authority having jurisdiction  
72 under Utah Code, Subsection 19-4-104(4)."

73 (7) In IRC, Section R202, the definition of "Cross Connection" is deleted and replaced  
74 with the following: "CROSS CONNECTION. Any physical connection or potential  
75 connection or arrangement between two otherwise separate piping systems, one of which  
76 contains potable water and the other either water of unknown or questionable safety or steam,  
77 gas, or chemical, whereby there exists the possibility for flow from one system to the other,  
78 with the direction of flow depending on the pressure differential between the two systems (see  
79 "Backflow, Water Distribution")."

80 (8) In IRC, Section 202, the following definition is added: "ENERGY STORAGE  
81 SYSTEM (ESS). One or more devices, assembled together, that are capable of storing energy  
82 for supplying electrical energy at a future time."

83 (9) In IRC, Section 202, in the definition for gray water a comma is inserted after the  
84 word "washers"; the word "and" is deleted; and the following is added to the end: "and clear  
85 water wastes which have a pH of 6.0 to 9.0; are non-flammable; non-combustible; without  
86 objectionable odors; non-highly pigmented; and will not interfere with the operation of the  
87 sewer treatment facility."

88 (10) In IRC, Section R202, the definition of "Potable Water" is deleted and replaced  
89 with the following: "POTABLE WATER. Water free from impurities present in amounts  
90 sufficient to cause disease or harmful physiological effects and conforming to the Utah Code,  
91 Title 19, Chapter 4, Safe Drinking Water Act, and Title 19, Chapter 5, Water Quality Act, and  
92 the regulations of the public health authority having jurisdiction."

93 (11) IRC, Figure R301.2(5), is deleted and replaced with R301.2(5) as follows:

94

"TABLE R301.2(5)

95

## GROUND SNOW LOADS FOR SELECTED LOCATIONS IN UTAH

96

City/Town

County

Ground Snow Load (lb/ft2)

Elevation (ft)

97

Beaver

Beaver

35

5886

98

Brigham City

Box Elder

42

4423

99

Castle Dale

Emery

32

5669

100

Coalville

Summit

57

5581

101

Duchesne

Duchesne

39

5508

102

Farmington

Davis

35

4318

103

Fillmore

Millard

30

5138

104

Heber City

Wasatch

60

5604

105

Junction

Piute

27

6030

106

Kanab

Kane

25

4964

107

Loa

Wayne

37

7060

108

Logan

Cache

43

4531

109

Manila

Daggett

26

6368

110

Manti

Sanpete

37

5620

111

Moab

Grand

21

4029

112

Monticello

San Juan

67

7064

113

Morgan

Morgan

52

5062

114

Nephi

Juab

39

5131

115

Ogden

Weber

37

4334

116

Panguitch

Garfield

41

6630

117

Parowan

Iron

32

6007

118

Price

Carbon

31

5558

119

Provo

Utah

31

4541

120

Randolph

Rich

50

6286

121

Richfield

Sevier

27

5338

122	St. George	Washington	21	2585
123	Salt Lake City	Salt Lake	28	4239
124	Tooele	Tooele	35	5029
125	Vernal	Uintah	39	5384
126	<p>Note: To convert lb/ft<sup>2</sup> to kN/m<sup>2</sup>, multiply by 0.0479. To convert feet to meters, multiply by 0.3048.</p> <p>1. Statutory requirements of the Authority Having Jurisdiction are not included in this state ground snow load table.</p> <p>2. For locations where there is substantial change in altitude over the city/town, the load applies at and below the cited elevation, with a tolerance of 100 ft (30 m).</p> <p>3. For other locations in Utah, see Bean, B., Maguire, M., Sun, Y. (2018), "The Utah Snow Load Study," Utah State University Civil and Environmental Engineering Faculty Publications, Paper 3589, <a href="http://utahsnowload.usu.edu/">http://utahsnowload.usu.edu/</a>, for ground snow load values.</p>			

(12) IRC, Section R301.6, is deleted and replaced with the following: "R301.6 Utah Snow Loads. The snow loads specified in Table R301.2(5b) shall be used for the jurisdictions identified in that table. Otherwise, for other locations in Utah, see Bean, B., Maguire, M., Sun, Y. (2018), "The Utah Snow Load Study," Utah State University Civil and Environmental Engineering Faculty Publications, Paper 3589, <http://utahsnowload.usu.edu/>, for ground snow load values."

(13) In IRC, Section R302.2, the following sentence is added after the second sentence: "When an access/maintenance agreement or easement is in place, plumbing, mechanical ducting, schedule 40 steel gas pipe, and electric service conductors including feeders, are permitted to penetrate the common wall at grade, above grade, or below grade."

(14) In IRC, Section R302.3, a new exception 3 is added as follows: "3. Accessory dwelling units separated by walls or floor assemblies protected by not less than 1/2-inch (12.7 mm) gypsum board or equivalent on each side of the wall or bottom of the floor assembly are exempt from the requirements of this section."

(15) In IRC, Section R302.5.1, the words "self-closing device" are deleted and replaced with "self-latching hardware."

(16) IRC, Section R302.13, is deleted.

144 (17) In IRC, Section R303.4, the number "5" is changed to "3" in the first sentence.

145 (18) In IRC, Section R310.6, in the exception, the words "or accessory dwelling units"  
146 are added after the words "sleeping rooms".

147 (19) IRC, Sections R311.7.4 through R311.7.5.3, are deleted and replaced with the  
148 following: "R311.7.4 Stair treads and risers. R311.7.5.1 Riser height. The maximum riser  
149 height shall be 8 inches (203 mm). The riser shall be measured vertically between leading  
150 edges of the adjacent treads. The greatest riser height within any flight of stairs shall not  
151 exceed the smallest by more than 3/8 inch (9.5 mm).

152 R311.7.5.2 Tread depth. The minimum tread depth shall be 9 inches (228 mm). The tread  
153 depth shall be measured horizontally between the vertical planes of the foremost projection of  
154 adjacent treads and at a right angle to the tread's leading edge. The greatest tread depth within  
155 any flight of stairs shall not exceed the smallest by more than 3/8 inch (9.5 mm). Winder  
156 treads shall have a minimum tread depth of 10 inches (254 mm) measured as above at a point  
157 12 inches (305 mm) from the side where the treads are narrower. Winder treads shall have a  
158 minimum tread depth of 6 inches (152 mm) at any point. Within any flight of stairs, the  
159 greatest winder tread depth at the 12-inch (305 mm) walk line shall not exceed the smallest by  
160 more than 3/8 inch (9.5 mm).

161 R311.7.5.3 Profile. The radius of curvature at the leading edge of the tread shall be no greater  
162 than 9/16 inch (14.3 mm). A nosing not less than 3/4 inch (19 mm) but not more than 1 1/4  
163 inches (32 mm) shall be provided on stairways with solid risers. The greatest nosing projection  
164 shall not exceed the smallest nosing projection by more than 3/8 inch (9.5 mm) between two  
165 stories, including the nosing at the level of floors and landings. Beveling of nosing shall not  
166 exceed 1/2 inch (12.7 mm). Risers shall be vertical or sloped from the underside of the leading  
167 edge of the tread above at an angle not more than 30 degrees (0.51 rad) from the vertical. Open  
168 risers are permitted, provided that the opening between treads does not permit the passage of a  
169 4-inch diameter (102 mm) sphere.

170 Exceptions.

171 1. A nosing is not required where the tread depth is a minimum of 10 inches (254 mm).

172 2. The opening between adjacent treads is not limited on stairs with a total rise of 30 inches  
173 (762 mm) or less."

174 (20) IRC, Section R312.2, is deleted.

(21) IRC, Sections R313.1 through R313.2.1, are deleted and replaced with the following: "R313.1 Design and installation. When installed, automatic residential fire sprinkler systems for townhouses or one- and two-family dwellings shall be designed and installed in accordance with Section P2904 or NFPA 13D."

(22) In IRC, Section R314.2.2, the words "or accessory dwelling units" are added after the words "sleeping rooms".

(23) In IRC, Section R315.2.2, the words "or accessory dwelling units" are added after the words "sleeping rooms".

(24) In IRC, Section 315.3, the following words are added to the first sentence after the word "installed": "on each level of the dwelling unit and."

(25) In IRC, Section R315.5, a new exception, 3, is added as follows:  
"3. Hard wiring of carbon monoxide alarms in existing areas shall not be required where the alterations or repairs do not result in the removal of interior wall or ceiling finishes exposing the structure, unless there is an attic, crawl space or basement available which could provide access for hard wiring, without the removal of interior finishes."

(26) A new IRC, Section R315.7, is added as follows: " R315.7 Interconnection. Where more than one carbon monoxide alarm is required to be installed within an individual dwelling unit in accordance with Section R315.1, the alarm devices shall be interconnected in such a manner that the actuation of one alarm will activate all of the alarms in the individual unit. Physical interconnection of smoke alarms shall not be required where listed wireless alarms are installed and all alarms sound upon activation of one alarm. Exception: Interconnection of carbon monoxide alarms in existing areas shall not be required where alterations or repairs do not result in removal of interior wall or ceiling finishes exposing the structure, unless there is an attic, crawl space or basement available which could provide access for interconnection without the removal of interior finishes."

(27) In IRC, Section R317.1.5, the period is deleted and the following language is added to the end of the paragraph: "or treated with a moisture resistant coating."

(28) In IRC, Section 326.1, the words "residential provisions of the" are added after the words "pools and spas shall comply with".

(29) [~~In IRC, Section R327.1 is deleted and replaced with the following:~~] A new IRC, Section 327, Stationary Storage Battery Systems, is added as follows:

"327.1 General. Energy storage systems (ESS) shall comply with the provisions of this section.

Exceptions:

1. ESS listed and labeled in accordance with UL 9540 and marked "For use in residential dwelling units", where installed in accordance with the manufacturer's instruction and NFPA 70.

2. ESS less than 1kWh (3.6 megajoules).["(30) In IRC, Section R327.2 is deleted and replaced with the following:"]

327.2 Equipment listings. ESS shall be listed and labeled in accordance with UL 9540. Exception: Where approved, repurposed unlisted battery systems from electric vehicle are allowed to be installed outdoors or in detached sheds located not less than 5 feet (1524 mm) from exterior walls, property lines and public ways.["(31) In IRC, Section R327.3 is deleted and replaced with the following:"]

327.3 Installation. ESS shall be installed in accordance with the manufacturer's instructions and their listing.["(32) In IRC, Section R327, a new section 327.3.1 is added as follows:"]

327.3.1 Spacing. Individual units shall be separate from each other by not less than three feet (914 mm) except where smaller separation distances are documented to be adequate based on large-scale fire testing complying with Section 1206.2.3 of the adopted International Fire Code.["(33) In IRC, Section 327.4 is deleted and replaced with the following:"]

327.4 Locations. ESS shall be installed only in the following locations:

1. Detached garages and detached accessory structures.

2. Attached garages separated from the dwelling unit living space in accordance with Section R302.6.

3. Outdoors or on the exterior side of exterior walls located not less than 3 feet (914 mm) from doors and windows directly entering the dwelling unit.

4. Enclosed utility closets, basements, storage or utility spaces within dwelling units with finished or noncombustible walls and ceilings. Walls and ceilings of unfinished wood-framed construction shall be provided with not less than 5/8-inch (15.9 mm) Type X gypsum wallboard.

ESS shall not be installed in sleeping rooms, or closets or spaces opening directly into



sleeping rooms.["(34) In IRC, Section 327.5 is deleted and replaced with the following: "]

327.5 Energy ratings. Individual ESS units shall have a maximum rating of 20 kWh.

The aggregate rating of the ESS shall not exceed:

1. 40 kWh within utility closets, basements, and storage or utility spaces.

2. 80 kWh in attached or detached garages and detached accessory structures.

3. 80 kWh on exterior walls.

4. 80 kWh outdoors on the ground.

ESS installations exceeding the permitted individual or aggregate ratings shall be installed in accordance with Sections 1206.2.1 through 1206.2.12 of the adopted International Fire Code.["(35) In IRC, Section 327.6 is deleted and replaced with the following: "]

327.6 Electrical installation. ESS shall be installed in accordance with NFPA 70.

Inverters shall be listed and labeled in accordance with UL 1741 or provided as part of the UL 9540 listing. Systems connected to the utility grid shall use inverters listed for utility interaction.["(36) In IRC, Section 327, a new section 327.7 is added as follows: "]

327.7 Fire detection. Rooms and areas within dwelling units, basements, and attached garages in which ESS are installed shall be protected by smoke alarms in accordance with Section R314. A heat detector, listed and interconnected to the smoke alarms, shall be installed in locations within dwelling units and attached garages where smoke alarms cannot be installed based on their listing.["(37) In IRC, Section 327, a new section 327.8 is added as follows: "]

327.8 Protection from impact. ESS installed in a location subject to vehicle damage shall be protected by approved barriers.["(38) In IRC, Section 327, a new section 327.9 is added as follows: "]

327.9 Ventilation. Indoor installations of ESS that include batteries that produce hydrogen or other flammable gasses during charging shall be provided with mechanical ventilation in accordance with Section M1307.4.["(39) In IRC, Section 327, a new section 327.10 is added as follows: "]

327.10 Electric vehicle use. The temporary use of an owner or occupant's electric-powered vehicle to power a dwelling unit while parked in an attached or detached garage or outdoors shall comply with the vehicle manufacturer's instructions and NFPA 70.["(40) In IRC, Section 327, a new section 327.11 is added as follows: "]

327.11 Signage. A sign located on the exterior of the dwelling shall be installed at a

location approved by the authority having jurisdiction which identifies the battery chemistry included in the ESS. This sign shall be of sufficient durability to withstand the environment involved and shall not be handwritten."

~~[(41)]~~ (30) In IRC, Section R403.1.6, a new Exception 3 is added as follows: "3. When anchor bolt spacing does not exceed 32 inches (813 mm) apart, anchor bolts may be placed with a minimum of two bolts per plate section located not less than 4 inches (102 mm) from each end of each plate section at interior bearing walls, interior braced wall lines, and at all exterior walls."

~~[(42)]~~ (31) In IRC, Section R403.1.6.1, a new exception is added at the end of Item 2 and Item 3 as follows: "Exception: When anchor bolt spacing does not exceed 32 inches (816 mm) apart, anchor bolts may be placed with a minimum of two bolts per plate section located not less than 4 inches (102 mm) from each end of each plate section at interior bearing walls, interior braced wall lines, and at all exterior walls."

~~[(43)]~~ (32) In IRC, Section R404.1, a new exception is added as follows: "Exception: As an alternative to complying with Sections R404.1 through R404.1.5.3, concrete and masonry foundation walls may be designed in accordance with IBC Sections 1807.1.5 and 1807.1.6 as amended in Section 1807.1.6.4 and Table 1807.1.6.4 under these rules."

~~[(44)]~~ (33) In IRC, Section R405.1, a new exception is added as follows: "Exception: When a geotechnical report has been provided for the property, a drainage system is not required unless the drainage system is required as a condition of the geotechnical report. The geological report shall make a recommendation regarding a drainage system."

Section 2. Section **15A-3-203** is amended to read:

**15A-3-203. Amendments to Chapters 6 through 15 of IRC.**

(1) In IRC, Section N1101.5 (R103.2), all words after the words "herein governed." are deleted and replaced with the following: "Construction documents include all documentation required to be submitted in order to issue a building permit."

(2) In IRC, Section N1101.12 (R303.3), all wording after the first sentence is deleted.

(3) In IRC, Section N1101.13 (R401.2), add Exception as follows:

"Exception: A project complies if the project demonstrates compliance, using the software RESCheck 2012 Utah Energy Conservation Code, of:

(a) on or after January 1, 2017, and before January 1, 2019, "3 percent better than

299 code";

300 (b) on or after January 1, 2019, and before January 1, 2021, "4 percent better than

301 code"; and

302 (c) after January 1, 2021, "5 percent better than code."

303 (4) In IRC, Table N1102.2 (R402.1.2), in the column titled MASS WALL R-VALUE,

304 a new footnote j is added as follows:

305 "j. Log walls complying with ICC400 and with a minimum average wall thickness of 5 inches

306 or greater shall be permitted in Zones 5 through 8 when overall window glazing has a .31

307 U-factor or lower, minimum heating equipment efficiency is 90 AFUE (gas) or 84 AFUE (oil),

308 and all other component requirements are met."

309 (5) In IRC, Section N1102.4.1 (R402.4.1), in the first sentence, the word "and" is

310 deleted and replaced with the word "or."

311 (6) In IRC, Section N1102.4.1.1 (R402.4.1.1), the last sentence is deleted and replaced

312 with the following: "Where allowed by the code official, the builder may certify compliance to

313 components criteria for items which may not be inspected during regularly scheduled

314 inspections."

315 (7) In IRC, Section N1102.4.1.2 (R402.4.1.2), the following changes are made:

316 (a) In the first sentence:

317 (i) "The building or dwelling unit" is deleted and replaced with "A single-family

318 dwelling";

319 (ii) after January 1, 2019, replace the word "five" with "3.5"; and

320 (iii) the words "in Climate Zones 1 and 2, and three air changes per hour in Climate

321 Zones 3 through 8" are deleted.

322 (b) The following sentence is inserted after the first sentence: "A multi-family dwelling

323 and townhouse shall be tested and verified as having an air leakage rate of not exceeding five

324 air changes per hour."

325 (c) In the third sentence, the word "third" is deleted.

326 (d) The following sentence is inserted after the third sentence: "The following parties

327 shall be approved to conduct testing: Parties certified by BPI or RESNET, or licensed

328 contractors who have completed training provided by Blower Door Test equipment

329 manufacturers or other comparable training."

- 330 (8) In IRC, Section N1103.3.3 (R403.3.3):
- 331 (a) the exception for duct air leakage testing is deleted; and
- 332 (b) the exception for duct air leakage is replaced:
- 333 (i) on or after January 1, 2017, and before January 1, 2019, with the following:
- 334 "Exception: The duct air leakage test is not required for systems with all air handlers and at
- 335 least 65% of all ducts (measured by length) located entirely within the building thermal
- 336 envelope.";
- 337 (ii) on or after January 1, 2019, and before January 1, 2021, with the following:
- 338 "Exception: The duct air leakage test is not required for systems with all air handlers and at
- 339 least 75% of all ducts (measured by length) located entirely within the building thermal
- 340 envelope."; and
- 341 (iii) on or after January 1, 2021, with the following: "Exception: The duct air leakage
- 342 test is not required for systems with all air handlers and at least 80% of all ducts (measured by
- 343 length) located entirely within the building thermal envelope."
- 344 (9) In IRC, Section N1103.3.3 (R403.3.3), the following is added after the exception:
- 345 "The following parties shall be approved to conduct testing: Parties certified by BPI or
- 346 RESNET, or licensed contractors who have completed either training provided by Duct Test
- 347 equipment manufacturers or other comparable training."
- 348 (10) In IRC, Section N1103.3.4 (R403.3.4):
- 349 (a) in Subsection 1, the number 4 is changed to 8, the number 113.3 is changed to 170,
- 350 the number 3 is changed to 6, the number 85 is changed to 114.6; and
- 351 (b) in Subsection 2:
- 352 (i) on or after January 1, 2017, and before January 1, 2019, the number 4 is changed to
- 353 8 and the number 113.3 is changed to 226.5;
- 354 (ii) on or after January 1, 2019, and before January 1, 2021, the number 4 is changed to
- 355 7 and the number 113.3 is changed to 198.2; and
- 356 (iii) on or after January 1, 2021, the number 4 is changed to 6 and the number 113.3 is
- 357 changed to 169.9.
- 358 (11) In IRC, Section N1103.3.5 (R403.3.5), the words "or plenums" are deleted.
- 359 (12) In IRC, Section N1103.5.3 (R403.5.3), Subsection 5 is deleted and Subsections 6
- 360 and 7 are renumbered.

(13) IRC, Section N1103.6.1 (R403.6.1), is deleted and replaced with the following:  
 "N1103.6.1 (R403.6.1) Whole-house mechanical ventilation system fan efficacy. Fans used to provide whole-house mechanical ventilation shall meet the efficacy requirements of Table N1103.6.1 (R403.6.1).

Exception: Where an air handler that is integral to tested and listed HVAC equipment is used to provide whole-house mechanical ventilation, the air handler shall be powered by an electronically commutated motor."

(14) In IRC, Section N1103.6.1 (R403.6.1), the table is deleted and replaced with the following:

TABLE N1103.6.1 (R403.6.1)

MECHANICAL VENTILATION SYSTEM FAN EFFICACY

FAN LOCATION	AIR FLOW RATE MINIMUM (CFM)	MINIMUM EFFICACY (CFM/WATT)	AIR FLOW RATE MAXIMUM (CFM)
HRV or ERV	Any	1.2 cfm/watt	Any
Range hoods	Any	2.8 cfm/watt	Any
In-line fan	Any	2.8 cfm/watt	Any
Bathroom, utility room	10	1.4 cfm/watt	<90
Bathroom, utility room	90	2.8 cfm/watt	Any

(15) In IRC, Section N1106.4 (R406.4), the table is deleted and replaced with the following:

TABLE N1106.4 (R406.4)

MAXIMUM ENERGY RATING INDEX

CLIMATE ZONE	ENERGY RATING INDEX
3	65
5	69
6	68

(16) In IRC, Section M1307.2, the words "In Seismic Design Categories D0, D1, and D2, and in townhouses in Seismic Design Category C", are deleted, and in Subparagraph 1, the

388 last sentence is deleted.

389 (17) In IRC, Section M1402.1, the following is added at the end of the second  
390 sentence: "or UL/CSA 60335-2-40."

391 (18) In IRC, Section M1403.1, the characters "/ANCE" are deleted.

392 [~~(17)~~] (19) IRC, Section M1411.8, is deleted.

393 (20) In IRC, Section M1412.1, the characters "/ANCE" are deleted.

394 (21) In IRC, Section M1413.1, the characters "/ANCE" are deleted.

395 Section 3. Section **15A-3-205** is amended to read:

396 **15A-3-205. Amendments to Chapters 26 through 35 of IRC.**

397 (1) A new IRC, Section P2602.3, is added as follows: "P2602.3 Individual water  
398 supply. Where a potable public water supply is not available, individual sources of potable  
399 water supply shall be utilized, provided that the source has been developed in accordance with  
400 Utah Code, Sections 73-3-1 and 73-3-25, as administered by the Department of Natural  
401 Resources, Division of Water Rights. In addition, the quality of the water shall be approved by  
402 the local health department having jurisdiction."

403 (2) A new IRC, Section P2602.4, is added as follows: "P2602.4 Sewer required. Every  
404 building in which plumbing fixtures are installed and all premises having drainage piping shall  
405 be connected to a public sewer where the sewer is accessible and is within 300 feet of the  
406 property line in accordance with Utah Code, Section 10-8-38; or an approved private sewage  
407 disposal system in accordance with Utah Administrative Code, Chapter 4, Rule R317, as  
408 administered by the Department of Environmental Quality, Division of Water Quality."

409 (3) In IRC, Section P2705, Item 5, the words "lavatory" and "lavatories" are deleted.

410 (4) In IRC, Section P2705, a new Item 6 is added as follows: "6. Lavatories. A lavatory  
411 shall not be set closer than 12 inches from its center to any side wall or partition. A lavatory  
412 shall be provided with a clearance of 24 inches in width and 21 inches in depth in front of the  
413 lavatory to any side wall, partition, or obstruction." Remaining item numbers are renumbered  
414 accordingly.

415 (5) In IRC, Section P2801.8, all words in the first sentence up to the word "water" are  
416 deleted.

417 (6) A new IRC, Section P2902.1.1, is added as follows: "P2902.1.1 Backflow assembly  
418 testing. The premise owner or the premise owner's designee shall have backflow prevention

assemblies operation tested in accordance with administrative rules made by the Drinking Water Board at the time of installation, repair, and relocation and at least on an annual basis thereafter, or more frequently as required by the authority having jurisdiction. Testing shall be performed by a Certified Backflow Preventer Assembly Tester. The assemblies that are subject to this paragraph are the Spill Resistant Vacuum Breaker, the Pressure Vacuum Breaker Assembly, the Double Check Backflow Prevention Assembly, the Double Check Detector Assembly Backflow Preventer, the Reduced Pressure Principle Backflow Preventer, and Reduced Pressure Detector Assembly. Third-party certification for backflow prevention assemblies will consist of any combination of two certifications, laboratory or field. Acceptable third-party laboratory certifying agencies are ASSE, IAPMO, and USC-FCCCHR. USC-FCCCHR currently provides the only field testing of backflow protection assemblies. Also see [www.drinkingwater.utah.gov](http://www.drinkingwater.utah.gov) and rules made by the Drinking Water Board."

(7) In IRC, Section P2902.1, the following subsections are added as follows:

"P2902.1.1 General Installation Criteria.

Assemblies shall not be installed more than five feet above the floor unless a permanent platform is installed. The assembly owner, where necessary, shall provide devices or structures to facilitate testing, repair, and maintenance, and to insure the safety of the backflow technician.

P2902.1.2 Specific Installation Criteria.

P2902.1.2.1 Reduced Pressure Principle [~~Backflow~~] Backflow Prevention Assembly.

The reduced pressure principle backflow prevention assembly shall be installed as follows:

- a. The assembly may not be installed in a pit.
- b. The relief valve of the assembly shall not be directly connected to a waste disposal line, including a sanitary sewer, a storm drain, or a vent.
- c. The assembly shall be installed in a horizontal position only, unless listed or approved for vertical installation in accordance with Section 303.4.
- d. The bottom of the assembly shall be installed a minimum of 12 inches above the floor or ground.
- e. The body of the assembly shall be a minimum of 12 inches from any wall, ceiling, or obstacle, and shall be readily accessible for testing, repair, and maintenance.

P2902.1.2.2 Double Check Valve Backflow Prevention Assembly.

A double check valve backflow prevention assembly shall be installed as follows:

- a. The assembly shall be installed in a horizontal position only, unless listed or approved for vertical installation.
- b. The bottom of the assembly shall be a minimum of 12 inches above the ground or floor.
- c. The body of the assembly shall be a minimum of 12 inches from any wall, ceiling, or obstacle, and shall be readily accessible for testing, repair, and maintenance.
- d. If installed in a pit, the assembly shall be installed with a minimum of 12 inches of clearance between all sides of the vault, including the floor and roof or ceiling, with adequate room for testing and maintenance.

P2902.1.2.3 Pressure Vacuum Break Assembly and Spill Resistant Pressure Vacuum Breaker Assembly.

A pressure vacuum break assembly or a spill resistant pressure vacuum breaker assembly shall be installed as follows:

- a. The assembly shall not be installed in an area that could be subject to backpressure or back drainage conditions.
- b. The assembly shall be installed a minimum of 12 inches above all downstream piping and the highest point of use.
- c. The assembly shall be a minimum of 12 inches from any wall, ceiling, or obstacle, and shall be readily accessible for testing, repair, and maintenance.
- d. The assembly shall not be installed below ground, in a vault, or in a pit.
- e. The assembly shall be installed in a vertical position."

(8) In IRC, Section 2903.5, at the beginning of the second sentence, insert "If installed,".

(9) In IRC, Section P2903.9.3, the first sentence is deleted and replaced with the following: "Unless the plumbing appliance or plumbing fixture has a wall-mount valve, shutoff valves shall be required on each fixture supply pipe to each plumbing appliance and to each plumbing fixture other than bathtubs and showers."

(10) IRC, Section P2910.5, is deleted and replaced with the following:

"P2910.5 Potable water connections.

When a potable water system is connected to a nonpotable water system, the potable water



481 system shall be protected against backflow by a reduced pressure backflow prevention  
482 assembly or an air gap installed in accordance with Section 2901."

483 (11) IRC, Section P2910.9.5, is deleted and replaced with the following:

484 "P2910.9.5 Makeup water.

485 Where an uninterrupted nonpotable water supply is required for the intended application,  
486 potable or reclaimed water shall be provided as a source of makeup water for the storage tank.  
487 The makeup water supply shall be protected against backflow by means of an air gap not less  
488 than 4 inches (102 millimeters) above the overflow or by a reduced pressure backflow  
489 prevention assembly installed in accordance with Section 2902."

490 (12) In IRC, Section P2911.12.4, the following words are deleted: "and backwater  
491 valves."

492 (13) In IRC, Section P2912.15.6, the following words are deleted: "and backwater  
493 valves."

494 [~~(14)~~ In IRC, Section P2913.4.2, the following words are deleted: "and backwater  
495 valves."]

496 [~~(15)~~] (14) IRC, Section P3009, is deleted and replaced with the following:

497 "P3009 Connected to nonpotable water from on-site water reuse systems.  
498 Nonpotable systems utilized for subsurface irrigation for single-family residences shall comply  
499 with the requirements of R317-401, UAC, Graywater Systems."

500 [~~(16)~~] (15) In IRC, Section P3103.6, the following sentence is added at the end of the  
501 paragraph: "Vents extending through the wall shall terminate not less than 12 inches from the  
502 wall with an elbow pointing downward."

503 [~~(17)~~] (16) In IRC, Section P3104.4, the following sentence is added at the end of the  
504 paragraph: "Horizontal dry vents below the flood level rim shall be permitted for floor drain  
505 and floor sink installations when installed below grade in accordance with Chapter 30, and  
506 Sections P3104.2 and P3104.3. A wall cleanout shall be provided in the vertical vent."

507 Section 4. Section **15A-3-206** is amended to read:

508 **15A-3-206. Amendments to Chapters 37, 39, and 44 and Appendix F of IRC.**

509 (1) In IRC, Section E3601.6.2, a new exception is added as follows: "Exception: An  
510 occupant of an accessory dwelling unit is not required to have access to the disconnect serving  
511 the dwelling unit in which they reside."

(2) In IRC, Section E3705.4.5, the following words are added after the word "assemblies": "with ungrounded conductors 10 AWG and smaller".

(3) In IRC, Section E3901.4.5, the last sentence in the exception is deleted and replaced with the following: "Receptacles mounted below the countertop in accordance with this exception shall not be located more than 14 inches from the bottom leading edge of the countertop."

(4) In IRC, Section E3901.9, the following exception is added:  
"Exception: Receptacles or other outlets adjacent to the exterior walls of the garage, outlets adjacent to an exterior wall of the garage, or outlets in a storage room with entry from the garage may be connected to the garage branch circuit."

(5) IRC, Section E3902.16 is deleted.

(6) In Section E3902.17:

(a) following the word "Exception" the number "1." is added; and

(b) at the end of the section, the following sentences are added:

"2. This section does not apply for a simple move or an extension of a branch circuit or an outlet which does not significantly increase the existing electrical load. This exception does not include changes involving remodeling or additions to a residence."

(7) IRC, Chapter 44, is amended by deleting the standard for "ANCE."

(8) In IRC, Chapter 44, the standard for ASHRAE is amended by changing "34-2013" to "34-2019."

(9) In IRC, Chapter 44, the standard for CSA, is amended by changing the:

(a) standard reference number "UL/CSA/ANCE 60335-2-40-2012" to "UL/CSA 60335-2-40-2019"; and

(b) title "Standard for Household and Similar Electrical Appliances, Part 2: Particular Requirements for Motor-Compressors" to "Standard for Household and Similar Electrical Appliances, Part 2-40, Requirements for Electric Heat Pumps, Air Conditioners and Dehumidifiers-3rd Edition."

(10) In IRC, Chapter 44, the standard for UL, is amended by changing the:

(a) standard reference number "1995-2011" to "1995-2015";

(b) standard reference number "UL/CSA/ANCE 60335-2-40-2012" to "UL/CSA 60335-2-40-2019"; and

(c) title "Standard for Household and Similar Electrical Appliances, Part 2: Particular Requirements for Motor-Compressors" to "Standard for Household and Similar Electrical Appliances, Part 2-40, Requirements for Electric Heat Pumps, Air Conditioners and Dehumidifiers-3rd Edition."

~~(7)~~ (11) IRC, Chapter 44, is amended by adding the following reference standard:

Standard reference number	Title	Referenced in code section number
USC-FCCCHR 10th Edition Manual of Cross Connection Control	Foundation for Cross-Connection Control and Hydraulic Research University of Southern California Kaprielian Hall 300 Los Angeles CA 90089-2531	Table P2902.3"

~~(8)~~ (12) In IRC, Chapter 44, is amended by adding the following reference standard:

"UL 9540-20: Energy Storage Systems and Equipment; R327.1, R327.2 and R327.6."

~~(9)~~ (13) (a) When passive radon controls or portions thereof are voluntarily installed, the voluntary installation shall comply with Appendix F of the IRC.

(b) An additional inspection of a voluntary installation described in Subsection (9)(a) is not required.

Section 5. Section **15A-3-306** is amended to read:

**15A-3-306. Amendments to Chapter 6 of IPC.**

(1) IPC, Section 602.3, is deleted and replaced with the following: "602.3 Individual water supply. Where a potable public water supply is not available, individual sources of potable water supply shall be utilized provided that the source has been developed in accordance with Utah Code, Sections 73-3-1, 73-3-3, and 73-3-25, as administered by the Department of Natural Resources, Division of Water Rights. In addition, the quality of the water shall be approved by the local health department having jurisdiction. The source shall supply sufficient quantity of water to comply with the requirements of this chapter."

(2) IPC, Sections 602.3.1, 602.3.2, 602.3.3, 602.3.4, 602.3.5, and 602.3.5.1, are deleted.

(3) A new IPC, Section 604.4.1, is added as follows: "604.4.1 Manually operated metering faucets for food service establishments. Self closing or manually operated metering

569 faucets shall provide a flow of water for at least 15 seconds without the need to reactivate the  
570 faucet."

571 (4) IPC, Section 606.5, is deleted and replaced with the following: "606.5 Water  
572 pressure booster systems. Water pressure booster systems shall be provided as required by  
573 Section 606.5.1 through 606.5.11."

574 (5) A new IPC, Section 606.5.11, is added as follows: "606.5.11 Prohibited  
575 installation. In no case shall a booster pump be allowed that will lower the pressure in the  
576 public main to less than the minimum water pressure specified in Utah Administrative Code  
577 R309-105-9."

578 (6) In IPC, Section 608.1, the words "and pollution" are added after the word  
579 "contamination."

580 (7) In IPC, Section 608.1, the following subsections are added as follows:

581 "608.1.1 General Installation Criteria.

582 An assembly shall not be installed more than five feet above the floor unless a permanent  
583 platform is installed. The assembly owner, where necessary, shall provide devices or structures  
584 to facilitate testing, repair, and maintenance and to insure the safety of the backflow technician.

585 608.1.2 Specific Installation Criteria.

586 608.1.2.1 Reduced Pressure Principle [~~Backflow~~] Backflow Prevention Assembly.

587 A reduced pressure principle backflow prevention assembly shall be installed as follows:

588 a. The assembly shall not be installed in a pit or below grade where the relief port could be  
589 submerged in water or where fumes could be present at the relief port discharge.

590 b. The relief valve of the assembly shall not be directly connected to a waste disposal line,  
591 including a sanitary sewer, storm drain, or vent.

592 c. The assembly shall be installed in a horizontal position, unless the assembly is listed or  
593 approved for vertical installation in accordance with Section 303.4.

594 d. The bottom of each assembly shall be installed a minimum of 12 inches above the ground or  
595 the floor.

596 e. The body of the assembly shall be a minimum of 12 inches from any wall, ceiling, or  
597 obstacle, and shall be readily accessible for testing, repair, and maintenance.

598 608.1.2.2 Double Check Valve Backflow Prevention Assembly.

599 A double check valve backflow prevention assembly shall be installed as follows:

- a. The assembly shall be installed in a horizontal position unless the assembly is listed or approved for vertical installation.
- b. The bottom of the assembly shall be a minimum of 12 inches above the ground or the floor.
- c. The body of the assembly shall be a minimum of 12 inches from any wall, ceiling, or obstacle, and shall be readily accessible for testing, repair, and maintenance.
- d. If installed in a pit, the assembly shall be installed with a minimum of 12 inches of clearance around all sides of the vault, including the floor and roof or ceiling, with adequate room for testing and maintenance.

608.1.2.3 Pressure Vacuum Breaker Assembly and Spill Resistant Pressure Vacuum Breaker Assembly.

A pressure vacuum breaker assembly and spill resistant pressure vacuum breaker assembly shall be installed as follows:

- a. The assembly shall not be installed in an area that could be subject to backpressure or back drainage conditions.
- b. The assembly shall be installed a minimum of 12 inches above all downstream piping and the highest point of use.
- c. The assembly shall be a minimum of 12 inches from any wall, ceiling, or obstacle, and shall be readily accessible for testing, repair, and maintenance.
- d. The assembly shall not be installed below ground or in a vault or pit.
- e. The assembly shall be installed in a vertical position."

(8) In IPC, Section 608.3, the word "and" before the word "contamination" is deleted and replaced with a comma and the words " or pollution" are added after the word "contamination" in the first sentence.

(9) In IPC, Section 608.6, the words "with the potential to create a condition of either contamination or pollution or" are added after the word "substances."

(10) In IPC, Section 608.7, the following sentence is added at the end of the paragraph: "Any connection between potable water piping and sewer-connected waste shall be protected by an air gap in accordance with Section 608.14.1."

(11) IPC, Section 608.8, is deleted and replaced with the following: " 608.8 Stop and Waste Valves installed below grade. Combination stop-and-waste valves shall be permitted to be installed underground or below grade. Freeze proof yard hydrants that drain the riser into

the ground are considered to be stop-and-waste valves and shall be permitted. A stop-and-waste valve shall be installed in accordance with a manufacturer's recommended installation instructions."

(12) IPC, Section 608.14.3, is deleted and replaced with the following: " 608.14.3 Backflow preventer with intermediate atmospheric vent. Backflow preventers with intermediate atmospheric vents shall conform to ASSE 1012 or CSA CAN/CSA-B64.3. These devices shall be permitted to be installed on residential boilers, without chemical treatment, where subject to continuous pressure conditions, and humidifiers in accordance with Section 608.17.10. The relief opening shall discharge by air gap and shall be prevented from being submerged."

(13) IPC, Section 608.14.4, is deleted.

(14) IPC, Section 608.16.3, is deleted and replaced with the following: " 608.16.3 Protection by a backflow preventer with intermediate atmospheric vent. Connections to residential boilers only, without chemical treatment, and humidifiers shall be protected by a backflow preventer with an intermediate atmospheric vent."

(15) IPC, Section 608.16.4, is deleted and replaced with the following: " 608.16.4 Protection by a vacuum breaker. Openings and outlets shall be protected by atmospheric-type or pressure-type vacuum breakers. Vacuum breakers shall not be installed under exhaust hoods or similar locations that will contain toxic fumes or vapors. Fill valves shall be set in accordance with Section 425.3.1. Atmospheric Vacuum Breakers - The critical level of the atmospheric vacuum breaker shall be set a minimum of 6 inches (152 mm) above the flood level rim of the fixture or device. Pipe-applied vacuum breakers shall be installed not less than 6 inches (152 mm) above the flood level rim of the fixture, receptor, or device served. No valves shall be installed downstream of the atmospheric vacuum breaker. The atmospheric vacuum breaker shall not be installed where it may be subjected to continuous pressure for more than 12 consecutive hours at any time. Pressure Vacuum Breaker - The critical level of the pressure vacuum breaker shall be set a minimum of 12 inches (304 mm) above the flood level of the fixture or device."

(16) In IPC, Section 608.16.4.2, the following is added after the first sentence: "Add-on-backflow prevention devices shall be non-removable. In climates where freezing temperatures occur, a listed self-draining frost proof hose bibb with an integral backflow

662 preventer shall be used."

663 (17) In IPC, Section 608.17.1.2, the words "or ASSE 1024" are deleted.

664 (18) IPC, Section 608.17.2, is deleted and replaced as follows: " 608.17.2 Connections  
665 to boilers. The potable supply to a boiler shall be protected by an air gap or a reduced pressure  
666 principle backflow preventer, complying with ASSE 1013, CSA B64.4 or AWWA C511.  
667 Exception: The potable supply to a residential boiler without chemical treatment may be  
668 equipped with a backflow preventer with an intermediate atmospheric vent complying with  
669 ASSE 1012 or CSA CAN/CSA-B64.3."

670 (19) In IPC, Section 608.17.4.1, a new exception is added as follows: "Exception: All  
671 class 1 and 2 systems containing chemical additives consisting of strictly glycerine (C.P. or  
672 U.S.P. 96.5 percent grade) or propylene glycol shall be protected against backflow with a  
673 double check valve assembly. Such systems shall include written certification of the chemical  
674 additives at the time of original installation and service or maintenance."

675 (20) IPC, Section 608.17.7, is deleted and replaced with the following: " 608.17.7  
676 Chemical dispensers. Where chemical dispensers connect to the water distribution system, the  
677 water supply system shall be protected against backflow in accordance with Section 608.14.1,  
678 Section 608.14.2, Section 608.14.5, Section 608.14.6 or Section 608.14.8. Installation shall be  
679 in accordance with Section 608.1.2. Chemical dispensers shall connect to a separate dedicated  
680 water supply line, and not a sink faucet."

681 (21) IPC, Section 608.17.8, is deleted and replaced with the following: " 608.17.8  
682 Portable cleaning equipment. Where the portable cleaning equipment connects to the water  
683 distribution system, the water supply system shall be protected against backflow in accordance  
684 with Section 608.14.1 or Section 608.14.2."

685 (22) A new IPC, Section 608.17.11, is added as follows: " 608.17.11 Automatic and  
686 coin operated car washes. The water supply to an automatic or coin operated car wash shall be  
687 protected in accordance with Section 608.14.1 or Section 608.14.2."

688 (23) IPC, Section 608.18, is deleted and replaced with the following: " 608.18  
689 Protection of individual water supplies. See Section 602.3 for requirements."

690 Section 6. Section **15A-3-402** is amended to read:

691 **15A-3-402. Amendments to Chapters 1 through 5 of IMC.**

692 (1) In IMC, Table 403.3.1.1, note h is deleted and replaced with the following:

"h. 1. A nail salon shall provide each manicure station where a nail technician files or shapes an acrylic nail, as defined by rule by the Division of Occupational and Professional Licensing, in accordance with Title 63G, Chapter 3, Utah Administrative Rulemaking Act, with:

a. a source capture system equipped with, at minimum, a MERV 8 particulate filter and an activated carbon filter that is capable of filtering and recirculating air to inside space at a rate not less than 50 cfm per station; or

b. a source capture system capable of exhausting not less than 50 cfm per station.

c. A nail salon that complies with Note h. 1a or h. 1b is not required to comply with the labeling, listing, or testing requirements described in International Mechanical Code sections 301.7 or 301.8.

2. For a source capture system described in paragraph 1, the source capture system inlets for exhausting or recirculating air shall be located in accordance with Section 502.20.

3. Where one or more exhausting source capture systems described in paragraph 1 operate continuously during occupancy, the source capture system exhaust rate shall be permitted to be applied to the exhaust flow rate required by Table 403.3.1.1 for the nail salon.

4. The requirements of this note apply to:

a. an existing nail salon that remodels the nail salon after July 1, 2017;

b. a new nail salon that begins construction after July 1, 2017; and

c. all nail salons beginning on July 1, 2020."

(2) In IMC, Section 502.20 is deleted and rewritten as follows:

"502.20 Manicure stations. A nail salon that files or shapes an acrylic nail shall provide each manicure station with a source capture system in accordance with Table 403.3.1.1, note h. For a manicure table that does not have factory-installed source capture system inlets for recirculating or exhausting air, a nail salon shall provide the manicure table with inlets for recirculating or exhausting air located not more than 12 inches (305 mm) horizontally and vertically from the point of any acrylic chemical application.

Exception: Section 502.20 applies to a manicure station in:

a. an existing nail salon that remodels the nail salon after July 1, 2017;

b. a new nail salon that begins construction after July 1, 2017; and

c. all nail salons beginning on July 1, 2020."



(3) In IMC, Section 908.1, the following words are added at the end of the last sentence: "or UL/CSA 60335-2-40."

(4) In IMC, Section 918.1, the following words are added after "1995": "or UL/CSA 60335-2-40."

(5) In IMC, Section 918.2, the following words are added at the end of the sentence: "or UL/CSA 60335-2-40."

(6) In IMC, Section 1101.2, the words "471 or 1995" are deleted and replaced with "471, 1995, or UL/CSA 60335-2-40."

(7) In IMC, Section 1101.6, the following sentence is added at the end of the paragraph: "High probability systems utilizing A2L refrigerants shall comply with ASHRAE 15."

(8) In IMC, Chapter 15, the standard for ASHRAE, is amended by changing the:

(a) standard reference number "15-2016" to "15-2019"; and

(b) standard reference number "34-2016" to "34-2019";

(9) In IMC, Chapter 15 is amended by adding the following referenced standard to CSA:

<u>"Standard reference number"</u>	<u>Title</u>	<u>Referenced in code section number</u>
CSA: CSA C22.2 60335-2-40-2019	Standard for Household and Similar Electrical Appliances, Part 2-40: Particular Requirements for Electrical Heat Pumps, Air-Conditioners and Dehumidifiers – 3rd Edition	M1403.1, M1412.1, M1413.1"

(10) In IMC, Chapter 15 is amended by adding the following referenced standard to UL:

<u>"Standard reference number"</u>	<u>Title</u>	<u>Referenced in code section number</u>

745	<u>UL: 60335-2-40-2019</u>	<u>Standard for Household and Similar Electrical Appliances, Part 2-40: Particular Requirements for Electrical Heat Pumps, Air-Conditioners and Dehumidifiers – 3rd Edition</u>	<u>M1403.1, M1412.1, M1413.1"</u>
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746 Section 7. Section **15A-5-202** is amended to read:

747 **15A-5-202. Amendments and additions to IFC related to administration, permits,**  
748 **definitions, and general and emergency planning.**

749 (1) For IFC, Chapter 1, Scope and Administration:

750 (a) IFC, Chapter 1, Section 102.5, is deleted and rewritten as follows:

751 "102.5 Application of residential code.

752 If a structure is designed and constructed in accordance with the International  
753 Residential Code, the provisions of this code apply only as follows:

754 1. The construction and design provisions of this code apply only to premises  
755 identification, fire apparatus access, fire hydrants and water supplies, and construction permits  
756 required by Section 105.7.

757 2. This code does not supercede the land use, subdivision, or development standards  
758 established by a local jurisdiction.

759 3. The administrative, operational, and maintenance provisions of this code apply."

760 (b) IFC, Chapter 1, Section 102.9, is deleted and rewritten as follows:

761 "102.9 Matters not provided for.

762 Requirements that are essential for the public safety of an existing or proposed activity,  
763 building or structure, or for the safety of the occupants thereof, which are not specifically  
764 provided for by this code, shall be determined by the fire code official on an emergency basis  
765 if:

766 (a) the facts known to the fire code official show that an immediate and significant  
767 danger to the public health, safety, or welfare exists; and

768 (b) the threat requires immediate action by the fire code official.

769 102.9.1 Limitation of emergency order.

770 In issuing its emergency order, the fire code official shall:

(a) limit the order to require only the action necessary to prevent or avoid the danger to the public health, safety, or welfare; and

(b) give immediate notice to the persons who are required to comply with the order, that includes a brief statement of the reasons for the fire code official's order.

101.9.2 Right to appeal emergency order.

If the emergency order issued under this section will result in the continued infringement or impairment of any legal right or interest of any party, the party shall have a right to appeal the fire code official's order in accordance with IFC, Chapter 1, Section 109."

(c) IFC, Chapter 1, Section 105.4.1, Submittals, is amended to add the following after the last sentence:

"Fire sprinkler system layout may be prepared and submitted by a person certified by the National Institute for Certification in Engineering Technologies at level III or IV in Water-Based System Layout. Fire alarm system layout may be prepared and submitted by a person certified by the National Institute for Certification in Engineering Technologies at level III or IV in Fire Alarm Systems."

~~[(e)]~~ (d) IFC, Chapter 1, Section 105.6.16, Flammable and combustible liquids, is amended to add the following section: "12. The owner of an underground tank that is out of service for longer than one year shall receive a Temporary Closure Notice from the Department of Environmental Quality and a copy shall be given to the AHJ."

~~[(d)]~~ (e) A new IFC, Chapter 1, Section 109.1.1, Application of residential code, is added as follows:

"109.1.1 Application of residential code.

For development regulated by a local jurisdiction's land use authority, the fire code official's interpretation of this code is subject to the advisory opinion process described in Utah Code, Section 13-43-205, and to a land use appeal authority appointed under Utah Code, Section 10-9a-701 or 17-27a-701."

~~[(e)]~~ (f) In IFC, Chapter 1, Section 109, a new Section 109.4, Notice of right to appeal, is added as follows: "At the time a fire code official makes an order, decision, or determination that relates to the application or interpretation of this chapter, the fire code official shall inform the person affected by the order, decision, or determination of the person's right to appeal under this section. Upon request, the fire code official shall provide a person affected by an order,

decision, or determination that relates to the application or interpretation of this chapter a written notice that describes the person's right to appeal under this section."

~~[(f)]~~ (g) IFC, Chapter 1, Section 110.3, Notice of violation, is deleted and rewritten as follows:

"110.3 Notice of violation.

If the fire code official determines that a building, premises, vehicle, storage facility, or outdoor area is in violation of this code or other pertinent laws or ordinances, the fire code official is authorized to prepare a written notice of violation that describes the conditions deemed unsafe and, absent immediate compliance, specifies a time for reinspection."

(2) For IFC, Chapter 2, Definitions:

(a) IFC, Chapter 2, Section 202, General Definitions, the following definition is added for Ambulatory Surgical Center: "AMBULATORY SURGICAL CENTER. A building or portion of a building licensed by the Department of Health where procedures are performed that may render patients incapable of self preservation where care is less than 24 hours. See Utah Administrative Code, R432-13, Freestanding Ambulatory Surgical Center Construction Rule."

(b) IFC, Chapter 2, Section 202, General Definitions, the following definition is added for Assisted Living Facility. "ASSISTED LIVING FACILITY. See Residential Treatment/Support Assisted Living Facility, Type I Assisted Living Facility, and Type II Assisted Living Facility."

(c) IFC, Chapter 2, Section 202, General Definitions, FOSTER CARE FACILITIES is amended as follows: The word "Foster" is changed to the word "Child."

(d) IFC, Chapter 2, Section 202, General Definitions, OCCUPANCY CLASSIFICATION, Educational Group E, Group E, day care facilities, is amended as follows:

(i) On line three delete the word "five" and replace it with the word "four"; and

(ii) On line four after the word "supervision" add the words "child care centers."

(e) IFC, Chapter 2, Section 202, General Definitions, OCCUPANCY CLASSIFICATION, Educational Group E, Five or fewer children, is amended as follows: The word "five" is deleted and replaced with the word "four" in both places.

(f) IFC, Chapter 2, Section 202, General Definitions, OCCUPANCY CLASSIFICATION, Educational Group E, Five or fewer children in a dwelling unit, is

833 amended as follows: The word "five" is deleted and replaced with the word "four" in both  
834 places.

835 (g) IFC, Chapter 2, Section 202, General Definitions, OCCUPANCY  
836 CLASSIFICATION, Educational Group E, a new section is added as follows: "Child day care  
837 -- residential child care certificate or a license. Areas used for child day care purposes with a  
838 residential child care certificate, as described in Utah Administrative Code, R430-50,  
839 Residential Certificate Child Care, or a residential child care license, as described in Utah  
840 Administrative Code, R430-90, Licensed Family Child Care, may be located in a Group R-2 or  
841 R-3 occupancy as provided in Residential Group R-3, or shall comply with the International  
842 Residential Code in accordance with Section R101.2."

843 (h) IFC, Chapter 2, Section 202, General Definitions, OCCUPANCY  
844 CLASSIFICATION, Educational Group E, a new section is added as follows: "Child care  
845 centers. Each of the following areas may be classified as accessory occupancies:  
846 1. Hourly child care centers, as described in Utah Administrative Code, R381-60,  
847 Hourly Child Care Centers;  
848 2. Child care centers, as described in Utah Administrative Code, R381-100, Child Care  
849 Centers; and  
850 3. Out-of-school-time programs, as described in Utah Administrative Code, R381-70,  
851 Out of School Time Child Care Programs."

852 (i) IFC, Chapter 2, Section 202, General Definitions, OCCUPANCY  
853 CLASSIFICATION, Institutional Group I-1, is amended as follows: Insert "Type I" in front of  
854 the words "Assisted living facilities".

855 (j) IFC, Chapter 2, Section 202, General Definitions, OCCUPANCY  
856 CLASSIFICATION, Institutional Group I-1, Five or fewer persons receiving custodial care is  
857 amended as follows: On line four after "International Residential Code" the rest of the section  
858 is deleted.

859 (k) IFC, Chapter 2, Section 202, General Definitions, OCCUPANCY  
860 CLASSIFICATION, Institutional Group I-2, is amended as follows:

- 861 (i) On line three delete the word "five" and insert the word "three";  
862 (ii) On line six the word "foster" is deleted and replaced with the word "child"; and  
863 (iii) On line 10, after the words "Psychiatric hospitals", add the following to the list:

"both intermediate nursing care and skilled nursing care facilities, ambulatory surgical centers with five or more operating rooms, and Type II assisted living facilities. Type II assisted living facilities with five or fewer persons shall be classified as a Group R-4. Type II assisted living facilities with at least six and not more than 16 residents shall be classified as a Group I-1 facility".

(l) IFC, Chapter 2, Section 202, General Definitions, OCCUPANCY CLASSIFICATION, Institutional Group I-4, day care facilities, Classification as Group E, is amended as follows:

(i) On line two delete the word "five" and replace it with the word "four"; and  
(ii) On line three delete the words "2 1/2 years or less of age" and replace with the words "under the age of two".

(m) IFC, Chapter 2, Section 202, General Definitions, OCCUPANCY CLASSIFICATION, Institutional Group I-4, day care facilities, Five or fewer occupants receiving care in a dwelling unit, is amended as follows: On lines one and three the word "five" is deleted and replaced with the word "four".

(n) IFC, Chapter 2, Section 202, General Definitions, OCCUPANCY CLASSIFICATION, Residential Group R-3, the words "and single family dwellings complying with the IRC" are added after the word "Residential Group R-3 occupancies".

(o) IFC, Chapter 2, Section 202, General Definitions, OCCUPANCY CLASSIFICATION, Residential Group R-3, Care facilities within a dwelling, is amended as follows: On line three after the word "dwelling" insert "other than child care".

(p) IFC, Chapter 2, Section 202, General Definitions, OCCUPANCY CLASSIFICATION, Residential Group R-3, a new section is added as follows: "Child Care. Areas used for child care purposes may be located in a residential dwelling unit when all of the following conditions are met:

1. Compliance with Utah Administrative Code, R710-8, Day Care Rules, as enacted under the authority of the Utah Fire Prevention Board;
2. Use is approved by the Department of Health under the authority of Utah Code, Title 26, Chapter 39, Utah Child Care Licensing Act, and in any of the following categories:
  - 1.1. Utah Administrative Code, R430-50, Residential Certificate Child Care; or
  - 1.2. Utah Administrative Code, R430-90, Licensed Family Child Care; and

1.3 Compliance with all zoning regulations of the local regulator."

(q) IFC, Chapter 2, Section 202, General Definitions, RECORD DRAWINGS, is amended as follows: Delete the words "a fire alarm system" and replace them with "any fire protection system".

(r) IFC, Chapter 2, Section 202, General Definitions, the following definition is added for Residential Treatment/Support Assisted Living Facility. "RESIDENTIAL TREATMENT/SUPPORT ASSISTED LIVING FACILITY. A residential facility that provides a group living environment for four or more residents licensed by the Department of Human Services, and provides a protected living arrangement for ambulatory, non-restrained persons who are capable of achieving mobility sufficient to exit the facility without the physical assistance of another person."

(s) IFC, Chapter 2, Section 202, General Definitions, the following definition is added for Type I Assisted Living Facility. "TYPE I ASSISTED LIVING FACILITY. A residential facility licensed by the Department of Health that provides a protected living arrangement, assistance with activities of daily living and social care to two or more ambulatory, non-restrained persons who are capable of mobility sufficient to exit the facility without the assistance of another person. Subcategories are:

Limited Capacity: two to five residents;

Small: six to sixteen residents; and

Large: over sixteen residents."

(t) IFC, Chapter 2, Section 202, General Definitions, the following definition is added for Type II Assisted Living Facility. "TYPE II ASSISTED LIVING FACILITY. A residential facility licensed by the Department of Health that provides an array of coordinated supportive personal and health care services to two or more residents who are:

A. Physically disabled but able to direct his or her own care; or

B. Cognitively impaired or physically disabled but able to evacuate from the facility, or to a zone or area of safety, with the physical assistance of one person. Subcategories are:

Limited Capacity: two to five residents;

Small: six to sixteen residents; and

Large: over sixteen residents."

Section 8. Section **15A-5-302** is amended to read:

**15A-5-302. Amendments and additions to NFPA related to National Fire Alarm and Signaling Code.**

For NFPA 72, National Fire Alarm and Signaling Code, 2016 edition:

(1) NFPA 72, Chapter 2, Section 2.2, NFPA Publications, is amended to add the following NFPA standard: "NFPA 20, Standard for the Installation of Stationary Pumps for Fire Protection, 2016 edition."

(2) NFPA 72, Chapter 10, Section 10.5.1, System Designer, Subsection 10.5.1.3(2), is deleted and rewritten as follows: [~~"National Institute of Certification in Engineering Technologies (NICET) fire alarm level II certified personnel."~~] "Certification by the National Institute for Certification in Engineering Technologies at level III or IV in Fire Alarm Systems."

(3) NFPA 72, Chapter 10, Section 10.5.2, System Installer, Subsection 10.5.2.3(2), is deleted and rewritten as follows: [~~"National Institute of Certification in Engineering Technologies (NICET) fire alarm level II certified personnel."~~] "Certification by the National Institute for Certification in Engineering Technologies at level III or IV in Fire Alarm Systems."

(4) NFPA 72, Chapter 10, Section 10.5.3, Inspection, Testing, and Maintenance Personnel, Subsection 10.5.3.1, is deleted and rewritten as follows:

"Service personnel shall be qualified and experienced in the inspection, testing, and maintenance of fire alarm systems. Qualified personnel shall meet the certification requirements stated in rule made by the State Fire Prevention Board in accordance with Title 63G, Chapter 3, Utah Administrative Rulemaking Act."

(5) NFPA 72, Chapter 10, Section 10.12, Fire Alarm Signal Deactivation, Subsection 10.13.2, is amended to add the following sentence: "When approved by the AHJ, the audible notification appliances may be deactivated during the investigation mode to prevent unauthorized reentry into the building."

(6) In NFPA 72, Chapter 23, Section 23.8.5.9, Signal Initiation -- Fire Pump, Subsection 23.8.5.9.3 is added as follows: "Automatic fire pumps shall be supervised in accordance with NFPA 20, Standard for the Installation of Stationary Pumps for Fire Protection, and the AHJ."

(7) NFPA 72, Chapter 26, Section 26.3.4, Indication of Central Station Service,



Subsection 26.3.4.7 is amended as follows: On line two, after the word "notified", insert the words "without delay" and delete the words, "within 30 calendar days".

Section 9. Section **58-22-305** is amended to read:

**58-22-305. Exemption from licensure.**

(1) In addition to the exemptions from licensure in Section 58-1-307, the following may engage in the following acts or practices without being licensed under this chapter:

(a) a person offering to render professional engineering, professional structural engineering, or professional land surveying services in this state when not licensed under this chapter if the person:

(i) holds a current and valid professional engineer, professional structural engineer, or professional land surveyor license issued by a licensing authority recognized by rule by the division in collaboration with the board;

(ii) discloses in writing to the potential client the fact that the professional engineer, professional structural engineer, or professional land surveyor:

(A) is not licensed in the state;

(B) may not provide professional engineering, professional structural engineering, or professional land surveying services in the state until licensed in the state; and

(C) that such condition may cause a delay in the ability of the professional engineer, professional structural engineer, or professional land surveyor to provide licensed services in the state;

(iii) notifies the division in writing of the person's intent to offer to render professional engineering, professional structural engineering, or professional land surveying services in the state; and

(iv) does not provide professional engineering, professional structural engineering, or professional land surveying services, or engage in the practice of professional engineering, professional structural engineering, or professional land surveying in this state until licensed to do so;

(b) a person preparing a plan and specification for a one or two-family residence not exceeding two stories in height;

(c) a person licensed to practice architecture under Title 58, Chapter 3a, Architects Licensing Act, performing architecture acts or incidental engineering or structural engineering

practices that do not exceed the scope of the education and training of the person performing engineering or structural engineering;

(d) unlicensed employees, subordinates, associates, or drafters of a person licensed under this chapter while preparing plans, maps, sketches, drawings, documents, specifications, plats, and reports under the supervision of a professional engineer, professional structural engineer, or professional land surveyor;

(e) a person preparing a plan or specification for, or supervising the alteration of or repair to, an existing building affecting an area not exceeding 3,000 square feet when structural elements of a building are not changed, such as foundations, beams, columns, and structural slabs, joists, bearing walls, and trusses;

(f) an employee of a communications, utility, railroad, mining, petroleum, or manufacturing company, or an affiliate of such a company, if the professional engineering or professional structural engineering work is performed solely in connection with the products or systems of the company and is not offered directly to the public;

(g) an organization engaged in the practice of professional engineering, structural engineering, or professional land surveying, provided that:

(i) the organization employs a principal; and

(ii) all individuals employed by the organization, who are engaged in the practice of professional engineering, structural engineering, or land surveying, are licensed or exempt from licensure under this chapter; ~~and~~

(h) a person licensed as a professional engineer, a professional structural engineer, or a professional land surveyor in a state other than Utah serving as an expert witness, provided the expert testimony meets one of the following:

(i) oral testimony as an expert witness in an administrative, civil, or criminal proceeding; or

(ii) written documentation included as part of the testimony in a proceeding, including designs, studies, plans, specifications, or similar documentation, provided that the purpose of the written documentation is not to establish specifications, plans, designs, processes, or standards to be used in the future in an industrial process, system, construction, design, or repair[-];

(i) a person certified by the National Institute for Certification in Engineering

1019 Technologies at level III or IV in Water-Based System Layout, who submits a fire sprinkler  
1020 system to the authority having jurisdiction, the fire code official, or the building official for  
1021 approval;

1022 (j) a person certified by the National Institute for Certification in Engineering  
1023 Technologies at level III or IV in Fire Alarm Systems, who submits a fire alarm system layout  
1024 to the authority having jurisdiction, the fire code official, or the building official for approval;

1025 (k) a fire code or building official reviewing construction documents for code  
1026 compliance; and

1027 (l) a fire code or building official conducting an inspection for code compliance.

1028 (2) Nothing in this section shall be construed to restrict a person from preparing plans  
1029 for a client under the [~~exemption~~] exemptions provided in [~~Subsection (1)(b)~~] Subsections  
1030 (1)(b), (1)(i), or (1)(j), or taking those plans to a professional engineer for the engineer's  
1031 review, approval, and subsequent fixing of the engineer's seal to that set of plans.